FIG.1

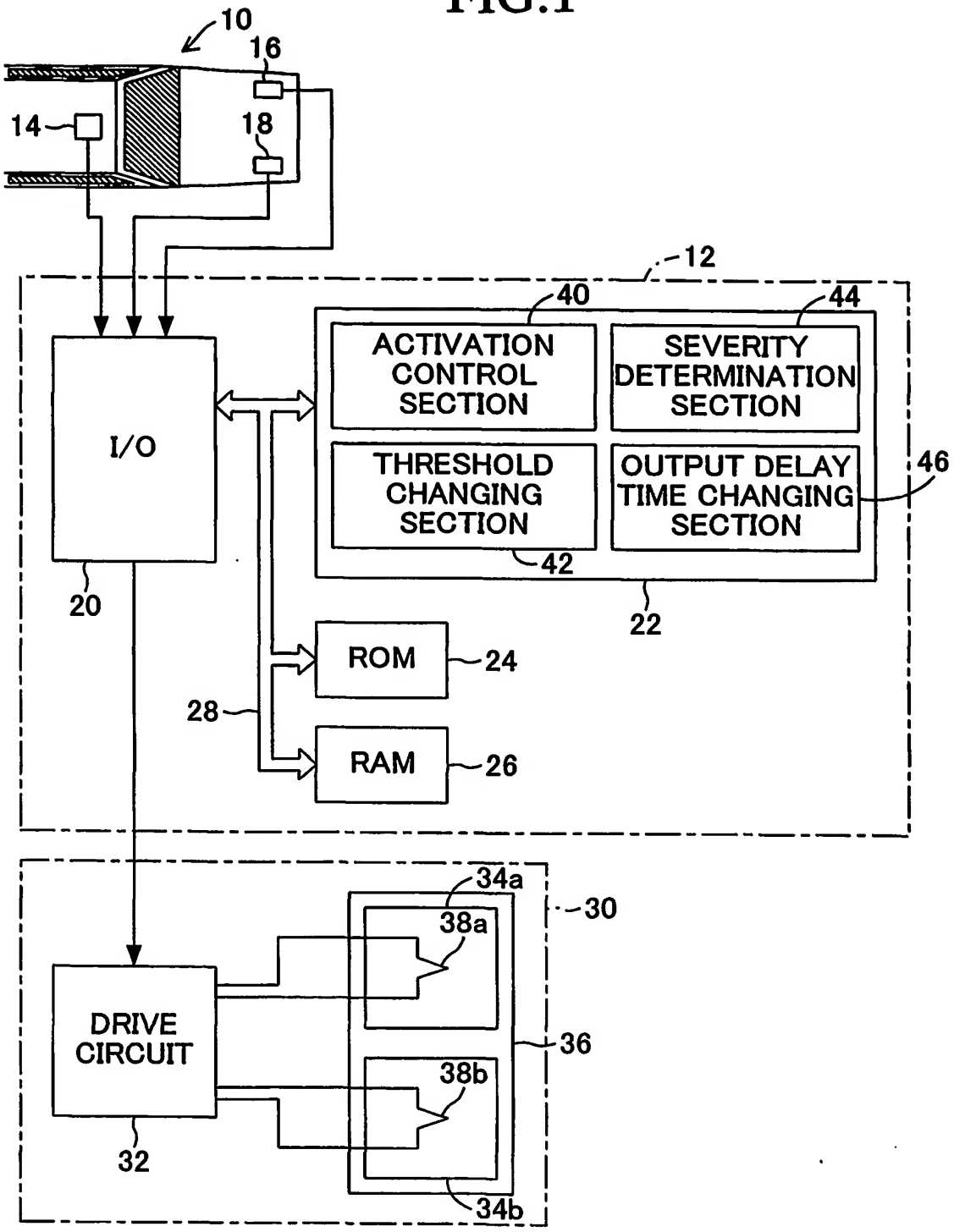

10
16
14
18
12
40
44
ACTIVATION CONTROL SECTION
SEVERITY DETERMINATION SECTION
I/O
THRESHOLD CHANGING SECTION
OUTPUT DELAY TIME CHANGING SECTION
46
42
20
22
ROM
24
28
RAM
26
34a
30
38a
DRIVE CIRCUIT
36
38b
32
34b

FIG.2

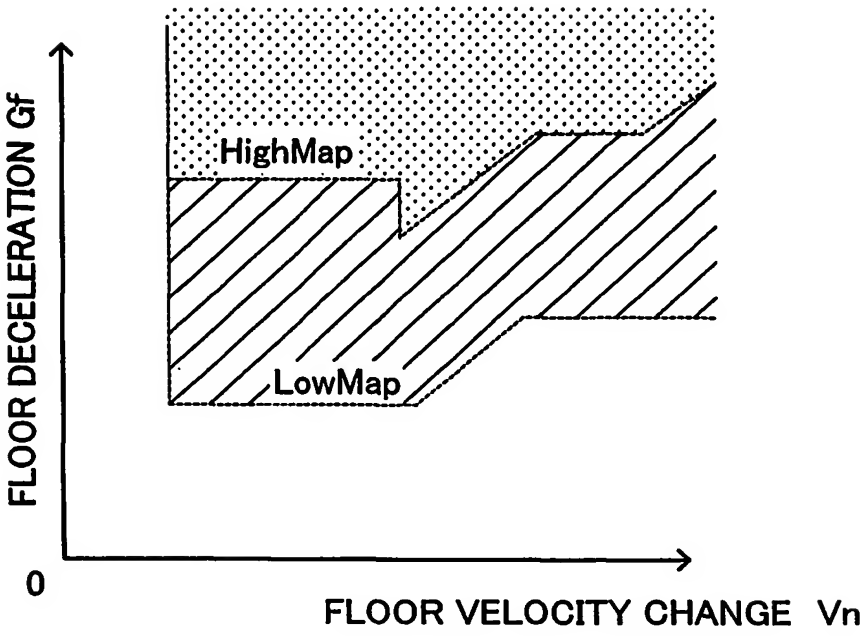

HighMap
LowMap
FLOOR DECELERATION Gf
0
FLOOR VELOCITY CHANGE Vn

FIG.3

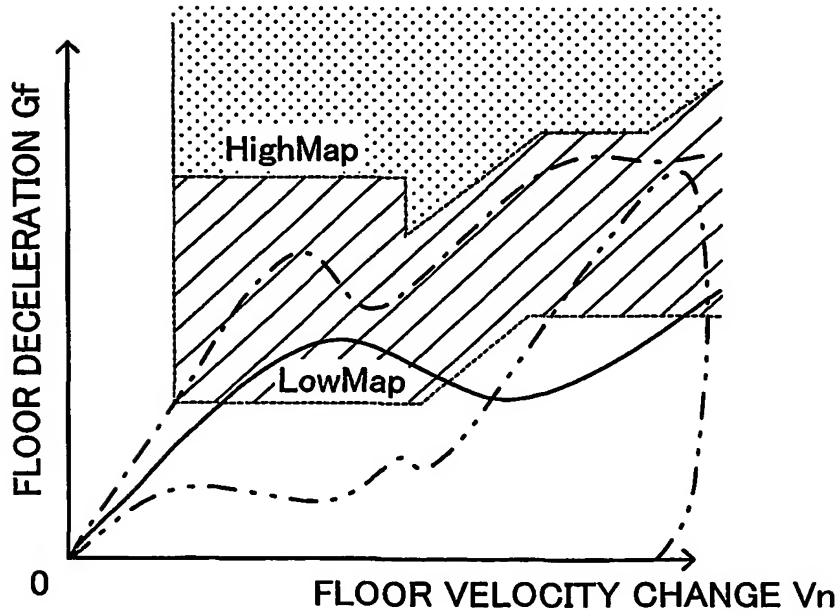

HighMap
LowMap
FLOOR DECELERATION Gf
0
FLOOR VELOCITY CHANGE Vn

FIG.4

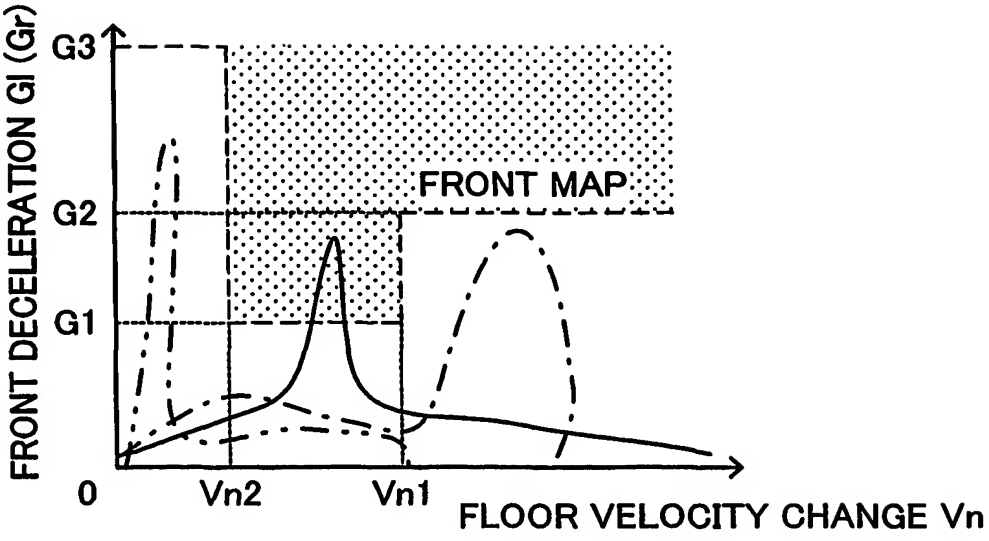

FRONT DECELERATION GI (Gr)
G3
G2
G1
FRONT MAP
0
Vn2
Vn1
FLOOR VELOCITY CHANGE Vn

FIG.5

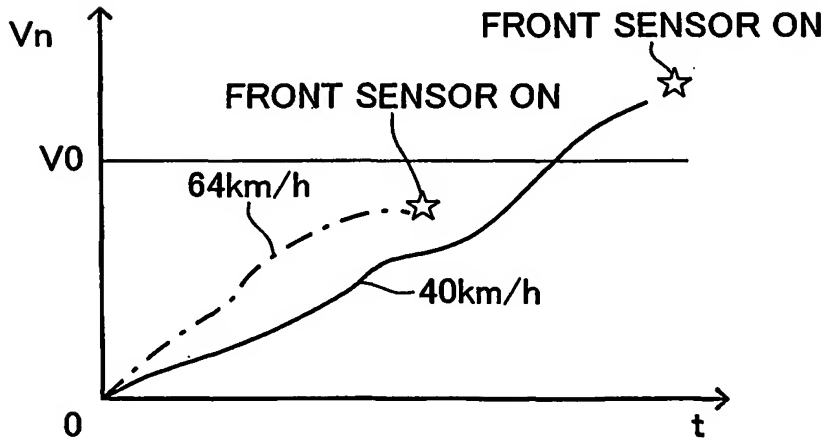

Vn
FRONT SENSOR ON
FRONT SENSOR ON
V0
64km/h
40km/h
0
t

FIG.6

SEVERITY / SYMMETRIC FLAG FRG	High	Low
TRUE	0ms	30ms
FALSE	30ms	100ms

FIG.7

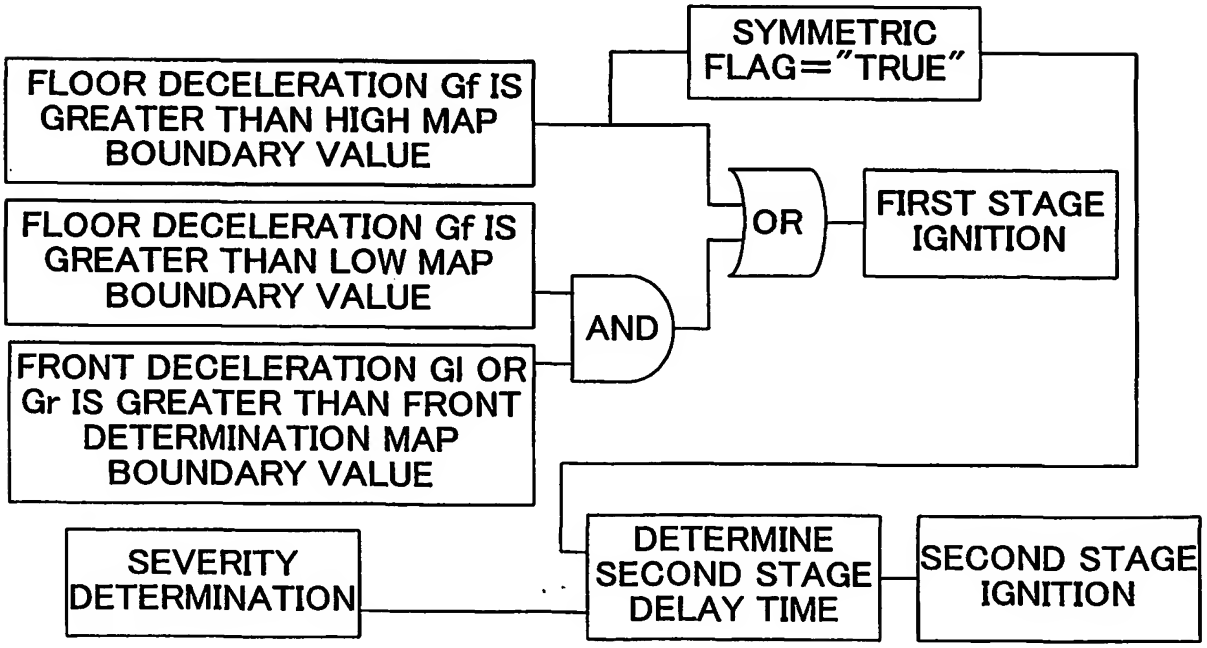
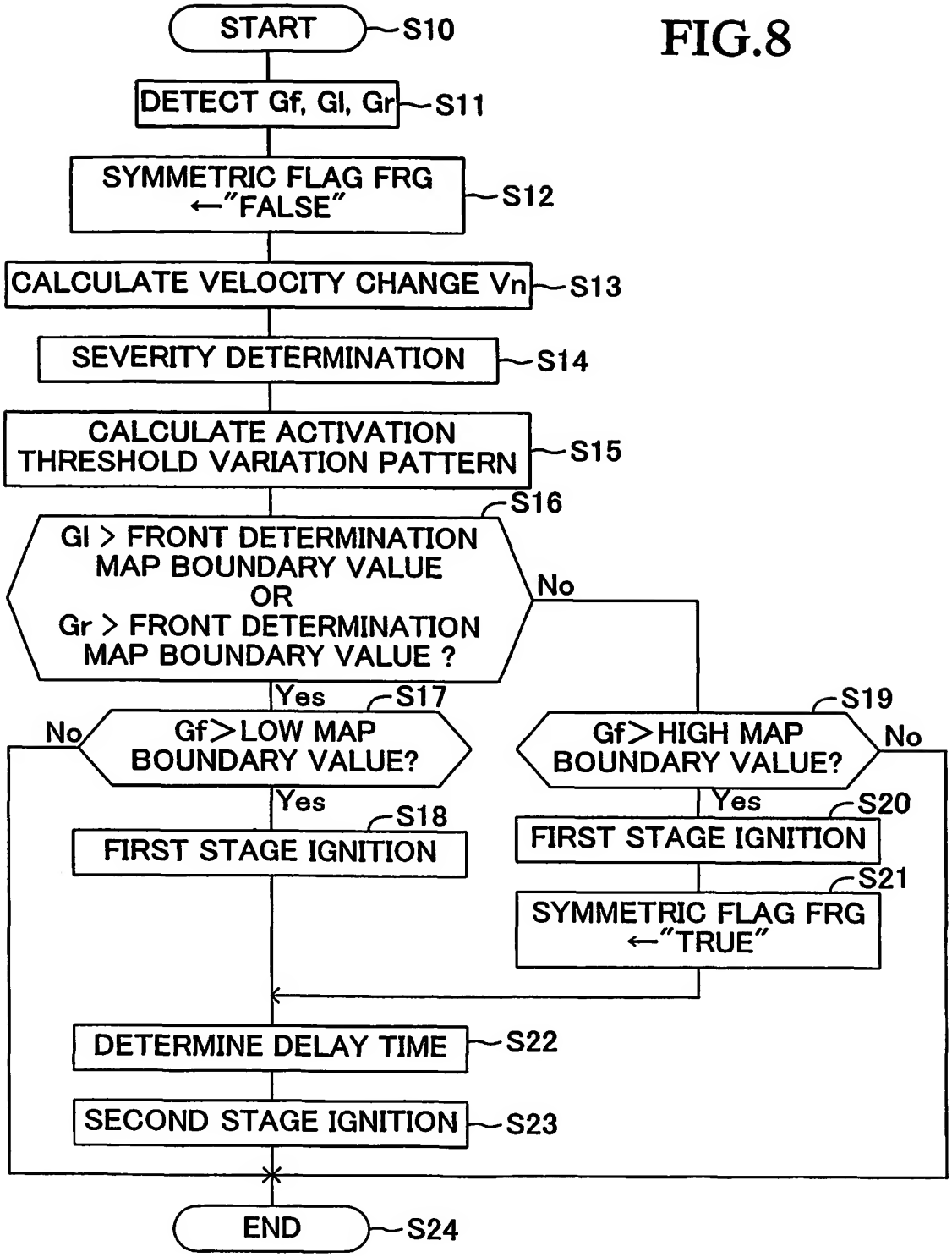


FIG.8


START
S10
DETECT Gf, Gl, Gr
S11
SYMMETRIC FLAG FRG ←"FALSE"
S12
CALCULATE VELOCITY CHANGE Vn
S13
SEVERITY DETERMINATION
S14
CALCULATE ACTIVATION THRESHOLD VARIATION PATTERN
S15
S16
Gl > FRONT DETERMINATION MAP BOUNDARY VALUE OR Gr > FRONT DETERMINATION MAP BOUNDARY VALUE ?
No
Yes
S17
No
Gf>LOW MAP BOUNDARY VALUE?
Yes
S18
FIRST STAGE IGNITION
S19
Gf>HIGH MAP BOUNDARY VALUE?
No
Yes
S20
FIRST STAGE IGNITION
S21
SYMMETRIC FLAG FRG ←"TRUE"
DETERMINE DELAY TIME
S22
SECOND STAGE IGNITION
S23
END
S24